DOCUMENT RESUME

UD 017 225 ED 142 675

AUTHOR Wohl, Seth F.

TITLE Benjamin Franklin High School Unit Program.

New York City Board of Education, Brooklyn, N.Y. INSTITUTION

Office of Educational Evaluation.

73 PUB DATE

70p.: New York City Board of Education Function No. NOTE

09-39615; Some parts of document are of marginal

print quality

MF-\$0.83 HC-\$3.50 Plus Postage. EDRS PRICE

*Academic Achievement; Alternative Schools; Changing DESCRIPTORS

Attitudes; Dropout Rate; Grade 9; Grade 10; High

School Students: *Mathematics: *Program Descriptions: *Program Evaluation: *Reading Achievement: Secondary

Education: Student Attitudes

*Elementary Secondary Education Act Title I; *New **IDENTIFIERS**

York (New York)

ABSTRACT

The Benjamin Franklin High School Unit Program in New York City was designed to overcome the serious academic deficiencies identified as criterion for entry into the program: retardation in reading and mathematics and to improve attitudes toward school, increase classroom attendance and participation, reduce the dropout rate, improve self-image and peer relationships, and to increase aspiration toward the adult world of work. The program served 561 9th and 10th year educationally disadvantaged high school freshmen and sophomores who were identified as having reading and mathematics standardized scores averaging 3 or more grade equivalent years below norm, and whose negative attitudes towards education made them potential dropouts. Enrollees were given a full day special educational program at a mini-school (or school-within-a-school complex) within Benjamin Franklin High School. Students helped to select their own courses from a special program catalog. Modular programming was used in the program. Overall, the direction of findings for all program objectives was positive. For the two most critical skill areas, reading and mathematics, achievement was shown to be statistically significant. (Author/AM)

Documents acquired by ERIC include many informal unpublished * materials not available from other sources. ERIC makes every effort *

* to obtain the best copy available. Nevertheless, items of marginal

* reproducibility are often encountered and this affects the quality

* of the microfiche and hardcopy reproductions ERIC makes available

*

* via the ERIC Document Reproduction Service (EDRS). EDRS is not * responsible for the quality of the original document. Reproductions *

* supplied by EDRS are the best that can be made from the original.

Function No. 09-39615

BENJAMIN FRANKLIN HIGH SCHOOL UNIT PROGRAM SCHOOL YEAR 1972-73

SETH F. WOHL

BEST COPY AVAILABLE

An evaluation of a New York City School district educational project funded under Title I of the Elementary and Secondary Education Act of 1965 (PL 89-10) performed for the Board of Education of the City of New York for the 1972-73 school year.

U.S. OE PARTMENT OF HEALTH, EQUICATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS OOCUMENT HAS BEEN REPRO-OUCEO EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGIN-ATING IT POINTS OF VIEW OR OPINIONS STATED OO NOT NECESSARILY REPRE-SENT OFFICIAL NATIONAL INSTITUTE OF EOUCATION POSITION OR POLICY

Dr. Anthony J. Polemeni, Director (Acting)





ACKNOWLEDGEMENTS

Grateful acknowledgement is extended to the Unit Coordinator of the Benjamin Franklin Unit Program, Mr. Hal Haicken for his continuous and total cooperation with the evaluation, as well as to his entire staff. Especial thanks go to the two Assistant Coordinators of "A" and "X" Units, Messrs.

Mike Meth and Carl Doerner for making available all records on a continuous basis, and to Mr. Stanley Moskowitz, Unit teacher for equivalent to full-time of several weeks in complete tally and recording of 242 student questionnaires x 79 items each = 19,118 bits of data. Grateful recognition is also due to Mr. Melvin Taylor, Acting Principal of Benjamin Franklin High School for fostering continuation of the original Cluster Program as the current dynamic Unit Program, and for maintaining open doors at all times to the evaluation.

At Central Headquarters, grateful acknowledgment is tendered the High School Projects Office in its cooperation with the evaluation and the Title I funding components through the work of its Coordinator and Assistant Coordinator Mesdames Ann Braunstein and Mary H. McLaughlin. Many thanks are also due to Ms. Josephine Spitalnick of the Bureau of Educational Research for her many days of computation work in statistical testing with the Olivetti 101 Desk Computor.

8fw



BENJAMIN FRANKLIN HIGH SCHOOL UNIT PROGRAM

	Table of Contents	Poge
Tab.	nowledgements le of Contents t of Tables tract of the Project	Page i ii iii iv
	roductory Statements	1
_		:
A.	Characteristics of the Population Served	1
в.	Cross Reference to Other Programs	1
C.		2
	Eval. Obj. #1 - Improvement in Reading and in Mathematics Eval. Obj. #2 - Student Attitudinal Survey Eval. Obj. #3 - Attitudes Held by Staff Eval. Obj. #4 - Dropout Rate Reduction Eval. Obj. #5 - Attendance Study	4 4 5 5
D.	Additional Evaluation Results (Findings)	5
	Findings for: Eval. Obj. #1 - Reading and Mathematics Achievement Eval. Obj. #2 - Attitudes Held by Students Eval. Obj. #3 - Attitudes Held by Staff Eval. Obj. #4 - Reduction of Dropout Rate Eval. Obj. #5 - A t t e n d a n c e S t u d y	5 11 16 24 26
E.	Other Narrative Information (Including: Summary, Conclusion & Recommendations)	28
	1. Summary of the Alternative School-Within-a-School Project	28
	2. Conclusion of the Sixth Year for the Benjamin Franklin Unit Program	30
	3. Recommendations of the Unit Program Evaluation	31
F.		34
LI	ST OF APPENDICES	34
A.	BFHS Unit Program Student Questionnaire (Form A)	35
B.	Benjamin Franklin H. S. Student Questionnaire (Form B)	41
C.	Benjamin Franklin Unit Program S t a f f Questionnaire	47
D.	Historical Regression Method ("Rhode Island Formula")	52
E.	Other Narrative Information (Unit Coordinator's Report)	54



- ii -

Title I: # 09 - 39615

BENJAMIN FRANKLIN HIGH SCHOOL UNIT PROGRAM

List of Tables

Table		Page
1.	45A. Standardized Test Results Benjamin Franklin High School Unit Program (for Treatment/Control or Covariance Designs).	6 - 7
2.	45B. Historical Regression Design® Benjamin Franklin High School Unit Program.	8 - 9
3.	Data of Student Attitudinal Questionnaire Toward Unit Program.	12 - 14
4.	Measures of Growth other than Standardized Tests Benjamin Franklin High School Unit Program.	15
5•	Data of the Staff Questionnaire Benjamin Franklin Unit Program — Spring 1973.	16 - 23
6.	Comparative Dropout Rates from Unit Program Classes & from Regular Classes.	25
7.	Comparative Absence Rates - Unit Program vs. Regular H. S. Classes School Year 1972 -73	27

BENJAMIN FRANKLIN HIGH SCHOOL UNIT PROGRAM (Formerly: Benjamin Franklin Cluster Program)

ABSTRACT OF THE PROJECT

Introduction

Having completed its sixth consecutive year from its founding in fall 1967, the UNIT PROGRAM is defined, as verified by highly statistically significant improvement in reading and in mathematics under Title I federal funding specific to these skill achievement areas, as an Exemplary Program.

Population Served

In the 1972-73 school year, the program has served 561 9th and 10th year educationally disadvantaged freshmen and sophomores in the high school, identified as having reading and mathematics standardized scores averaged 3 or more grade equivalent years below norm, and whose negative attitudes towards education, themselves, social interactions and work aspirations made them potential dropouts.

Program Characteristics

Enrollees were given a full day special educational program as a mini-school (or school-within-a-school complex) within Benjamin Franklin High School with courses in English, Reading, Mathematics, Social Studies and Science departments, such as: Workshop in Math Computation, Map Skills, The Black Experience in Poetry, Projects in Science, Newspaper, Phonics and Word Skills, Tools of Measurement, Reading Laboratory, Television Workshop, Life in Africa Today, Blood and its Diseases, Down These Mean Streets (novel used as course) Drama Workshop and Letter Writing.

Students helped select their own courses from a special Unit Program catalogue. The course scheduling takes place as a form of modular programing or modular design known as "PHASING." Each so-called "PHASE" lasts 6-weeks (30 school days) = 3 Phases per regular school term = 5 Phases per school year.

Staffing

The semi-independent administrator for the program is a teacher assigned as Unit Coordinator who has under him two assistant coordinators, curriculum developers, the services of teachers and educational assistants, and the resources of two guidance counselors and a half-time social worker together with several family assistants. The Unit Coordinator reports directly only to the high school Principal.

Program Objectives

Goal of the project is to overcome the serious academic deficiencies identified as criterion for entry into the program: retardation in reading and mathematics, and to improve attitudes toward school, increase classroom attendance and participation, reduce dropoutism, improve self-image and peer relationships, and to increase aspiration toward the adult world of work.

Nine Evaluation Objectives in the original Evaluation Design were condensed down to four(4) by combining and constructing cooperatively with Unit Program staff a single unified Student Attitudinal Questionnaire incorporating elements from 6 previous objectives. Additionally a new objective on staff attitude with a Staff Attitudinal Questionnaire was added for a total of five(5) Design Evaluation Objectives.

The findings from these five (5) modified Evaluation Objectives, as implemented, are given as follows:



Findings

Objective #1 for standardized reading and mathematics achievement by use of the Metropolitan Achievement Tests for Reading (intermediate) and the California Achievement Tests in Mathematics (level 4), was fully met. Highly statistically significant gains for all 9th and 10th year subgroups (beyond expectation according to the historical regression or Rhode Island method) in reading and in mathematics beyond the probability level at 1% that such gains could have occurred only by chance occurred. This is the single set of most important hard data success in the achievements of this unique project, which defines it according to the standards of the New York State Education Department as an Exemplary Program.

Objective #2 for student attitude was found to be positive for all categories on the Student Attitudinal Questionnaire given all Unit Program enrollees. However, change from earlier attitude set is unknown inasmuch as the late spring evaluation did not cotain a pre- and a post-measure. Also, no significant differences were found on any of the questionnaire categories between Unit Program population and the control population sampled. Hence, objective #2 was not fully met.

Objective #3 for staff attitude was similarly found to be positive toward the project as seen in the thoroughgoing Staff Attitudinal Questionnaire, but with specific criticisms voiced toward various aspects of the program, particularly toward certain administrative functions. No criterion was established for this objective. Other than the successful completion of the objective of assessing and analyzing most completely staff opinion, no other criterion beyond that of general positivity was seen for this objective.

Objective #4 for reducing dropout rates was partially implemented. Data was available only by class groups, and showed a 23.6% lower dropout rate for Unit Program enrollees than for control classes. Thus, the criterion required of a 25% improvement in dropout rates due to Unit Program was not met. Hence, objective #4 was only partly realized.

Objective #5 for improving attendance was also partially implemented. The Unit Program population showed a better average attendance for the school year 1972-73 than that of the control population by 14.7%. Since this was less than the minimum criterion requirement set at 20% improvement, the criterion was not met. The objective for attendance improvement was only partially realized.

Conclusion

Overall, the direction of findings for all objectives was positive and for the two most critical areas of reading and mathematics achievement was highly statistically significant by standard measure and "t" test beyond the 1% level of probability, thus making this an Exemplary Program.

Therefore, it is concluded that the Unit Program is an effective school within a school project that produces strong positive learning achievement and positive attitudinal affects upon a disadvantaged 9th, and 10th year high school population, selected for their deficiencies in reading, in mathematics and in their attitude set.

Recommendations

The program has been recommended for recycling a 7th consecutive year with specific recommendations made for expansion of its student population, staffing, updating standardized achievement tests in use for reading and mathematics, administering of the student attitudinal questionnaire on a pre-post-test comparison basis, allocating 12% - 15% of funding for a-v media and materials including a Language Learning Laboratory with a 600+ student capacity, utilizing streetworkers



to follow-up on student problems beyond the classroom, and providing in-service teacher training sessions to up-grade precision teaching and other skills of the Unit Program staff.

* # #

Prepared by: Seth F. Wohl

Bureau of Educational Research.



Narrative Report with Attached Data BENJAMIN FRANKLIN HIGH SCHOOL UNIT PROGRAM Final Evaluation Report for School Year 1972-1973

INTRODUCTORY STATEMENTS

This is the 6th Final Report of a categorically (federal Title I) aided education project originated in School Year 1967-68 under the name "Cluster Program." It is the continuation and expansion of a school-within-a-school ("minischool") concept.

The late assigned project evaluation began in March and ended in June 1973. It was based on the Evaluation Design of August 1972, prepared by the Bureau of Educational Research, modified as indicated in Section C on Objectives below, owing to time factors, limited budget and personnel (one person) allocation to the evaluation.

A. CHARACTERISTICS OF THE POPULATION SERVED

Educationally disadvantaged students already enrolled at Benjamin Franklin High School, identified by teachers and counselors as potential school failures and dropouts constitute the program input. The 375 students called for in the Evaluation Design whose reading and mathematics scores averaged 3 or more grade equivalent years below norm was modified and expanded to 450 minth year and 100+tenth year students for a total of at least 550 participants.

B. CROSS REFERENCE TO OTHER PROGRAMS

This program is to be compared with the regular Benjamin Franklin High School conventional program as a base line referent or control. The Unit Program is, however, a long-term project that is considered by its staff as thoroughly unique to the indigenous situation.

Rothbell, Gladys. Benjamin Franklin High School Cluster Program.

(The First Year of a School Within a School in an East Harlem High School).

New York: Center for Urban Education. December 1968.

(History of Cluster Program: pp. 1-3, ff.)



The nearest analogous program may be the Haaren High School "Minischool Complex," but there is no direct relationship to or communication with this or other internal complete school-within-a-school projects.

Title I monies were to be expended only for personnel and materials directly applicable to improvement of reading and mathematics components of the curriculum. According to the Project Proposal for 1972-73, the allocation of personnel and materials under Title I was as follows:

- 5 Teacher-specialists as Curriculum Developers
- 2 Guidance Counselors
- Social Worker
- 10 Educational Assistants
 - 2 Family Assistants
 - 1 School Secretary.

General instructional supplies, office supplies and materials including audiovisual equipment and materials were provided under a total Project Budget of \$228,598.

The Unit Coordinator, his two Assistant Coordinators, classroom teachers, general school supplies and plant maintenance were provided for under tax levy support from the parent Benjamin Franklin High School. The Evaluation Budget was set at less than 1% of the total budget, (\$2,242.).

C. STATEMENT OF OBJECTIVES

Main purposes of the recycled program are to overcome serious academic deficiencies in: reading and mathematics; and, to improve attitudes toward school, increase classroom attendance and participation, improve self-image and peer relationships, and to increase aspiration toward the adult world of work.



The nine (9) Program Objectives of the project as stated in the original Evaluation Design of August 1972 are as follows:

- 1. Recognition by the student of progress in the acquisition of basic skills in all subjects
- 2. Feeling of competence on the part of the students in performing tasks and making decisions.
- 3. Pursuit (through course selection and other means) of satisfying paths of learning and experience of the student's own definition.
- 4. Development of feelings of competence in relations with family, authority figures, and peers.
- 5. Development of self-esteem (and the concomitant respect for others).
- 6. Preparation for flexible post high school goal, be it a specific vocation or trade or continuing education.
- 7. Accelerate the pace of acquisition of reading and math skills so that all students in the program achieve at least two years' growth during a year in school.
- 8. Reduce dropout rate.
- 9. Maintain higher levels of attendance than those recorded in the school in previous years, by 25-50% improvement.

The nine (9) Program Objectives above provided the basis for nine (9) Evaluation Objectives in the Design of August 1972. The nine (9) Evaluation Objectives matched the nine (9) Program Objectives on a point-by-point basis. However, due to the lateness in evaluation assignment as stated in "Introductory Statements," page 1, and the ensuing problems resultant from such late assignment, modifications were made in the original Evaluation Objectives.

These modifications condensed the nine (9) original Evaluation Objectives and their separate disparate instrumentation into five (5) revised Evaluation Objectives with some combined instrumentation as follows:



E. O. #1 = Design Eval. Obj. #7 for statistically significant improvement in reading and in mathematics by measurement pre- and post- with standardized achievement testing. The instruments used were the Intermediate Forms of the Metropolitan Achievement Tests in Reading (1958 edition, World Book Co., Yonkers, N.Y.) and the Level 4 Forms of the California Achievement Tests in Mathematics (1970 edition, CTB / McGraw-Hill Book Co., Monterey, Calif.). Use of frequency distribution tables was eliminated and significance was determined by correlated t-test, using the New York State Education Department M. I. R. Form #45A, and the same t-test, using M. I. R. Form #45B -- the Historic Regression Formula ("Rhode Island" Method). (See Appendix D).

<u>E. O. #2</u> = Design Eval. Obj. Nos. 1-through-5 inclusive + No. 6 readapted from staff estimation about their students to students' self-appraisal, thus constituting a <u>student</u> attitudinal <u>survey</u>:

Design E. O. #1 on student opinion of their acquisition of basic skills;

Design E. O. #2 on student feeling of competence;

Design E. O. #3 on student sense of pursuit of institutional goals;

Design E. O. #4 on student social attitudes, authority and peer relations;

Design E. O. #5 on student self-image; and

Design E. O. #6 on vocational work/educational goals (as readapted)—
were all combined into one instrument, the <u>Unit Program Student Questionnaire</u>
(79 items) Form A and alternate Form B for controls not in the Unit Program
attending Benjamin Franklin High School. The instrument was applied in a single
massive post hoc administration in May 1973 and the results summarized to the
New York State Education Department on M. I. R. Form #45C. The instrument was
developed by the evaluator cooperatively with the Unit Coordinator and his entire
staff (see Appendices A and B).

E. O. #3 on attitudes held by staff was a completely new added objective not reflected in the original Design of August 1972. The instrument reflecting these attitudes was the <u>Unit Program Staff Questionnaire</u>, an exhaustive 5-page document developed by the evaluator cooperatively with the entire unit staff,

and completed in a one shot take-home administration in May 1973 (see Appendix C).

E. O. #4 = Design Eval. Obj. #8 on <u>dropout rate reduction</u> was not completed. While dropout figures were available for some Unit Program classes, specific dropout figures for a randomly selected control group of 375 regular students were not obtained due to late start in the evaluation and shortage of personnel.

E. O. #5 = Design Eval. Obj. #9 on attendance study was also an incomplete study. Attendance averages for Unit Program classes and for some 9th and 10th grade "control" classes were obtained. However, longitudinal data for 2-years matched to each student was too time consuming to obtain with the time and resources available so that this objective remained incompleted from the design requirement. In modified E. O. #5, frequency distribution tables and computation of medians was eliminated from this objective.

D. ADDITIONAL EVALUATION RESULTS (F I N D I N G S)

Findings for Eval. Obj. #1. Reading and Mathematics Achievement.

Table 1 immediately below presents the results of pre- and post- administration of the Intermediate: Metropolitan Achievement Tests (old 1958 edition) and the Level 4: California Achievement Tests (1970 edition) in the correlated "t" test study submitted as M. I. R. Form #45A to the New York Stated Education Department. The table is, in fact, an exact replica of Form #45A.

Table 2 consists of the very same achievement test data on reading and mathematics achievement of Table 1, recomputed by means of the Historic Regression

Formula: and then subjected to correlated "t" testing on the basis of a predicted vs. actual post-test score.

Insert Table 1 (pp. 6 & 7)	Insert Table 2 (pp. 8 & 9)
(pp: 0 a //	(pp. 6 d 9)



45A. Standardized Test Results BENJAMIN FRANKLIN HIGH SCHOOL -- U N I T PROGRAM-

In the table below, please enter the requested information about the tests used to evaluate the effectiveness of major project component/activities in achieving desired objectives. If there was only one testing period report the mean scores (grade equivalents) in the column "actual posttest." Attach additional sheets if necessary. Before completing this question, read all footnotes.

							ηAη										tical Data
Com- ponent Code	Activ- ity Code	Objec. tive Code	1	Form	Level	Total N <u>l</u> /	Group	Sam	3/	Pre Pate	4/		est 4/	<u>5</u> /	Used	t Test Ob- tained Value <u>6</u> /	Specify Level of Significance Obtained (e.g. p≤.05;≤.01
60715	710	800	M. A. T. READING	Bm.	Inter medi- ate	II ' *	9th Yr.										* Highly Significant @ p≤.01
																, 10-	
			C. A. T. MATH.	A & B	4		9th Yr.	114	X	9/72	4.9	5/73	6.0	113	t =	10.1383	* Highly Significant @ p≪.01
\ \ \		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				V											

^{1/}Total N (total number). Indicate the total number of participants in the component.

^{2/}Group I.D. (group identification). Indicate group, e.g. grade 5; grade 3 control; grade 3 treatment (a control group consists of students selected at the same time that treatment participants were selected and who essentially have the same characteristics as the treatment group. The control group does not take part in the compensatory activity, whereas the treatment group does.)

^{3/}Y/N (yes/no) Is sample representative of universe? Check Y (yes) or N (no).

^{4/}Mean. Use grade equivalents unless unavailable from publisher's norms. Specify type of mean used.

^{4 5/}d.f. (degrees of freedom). Indicate degrees of freedom used in analysis.

4 6/m used and value (e.g., t=3.85, F=4.17, etc.). Scores for the same individuals should be included in pre and ERIC est calculations.

45A. Standardized Test Results BENJAMIN FRANKLIN HIGH SCHOOL -- U N I T PROGRAM

In the table below, please enter the requested information about the tests used to evaluate the effectiveness of major project component/activities in achieving desired objectives. If there was only one testing period report the mean scores (grade equivalents) in the column "actual posttest." Attach additional sheets if necessary. Before completing this question, read all footnotes.

								пХи										Statis	tical Data
po Co	nent	Act iv- ity Code	Objec- tive Code		Form	Level	Total N <u>1</u> /	Group ID		3	3/	***	4/	Actu Postt Date	est 4/	<u>5</u> /	Üsed	0b-	Specify Level of Significance Obtained (e.g. p≤.05;≤.01*
60	7715 16	710	800	M. A. T. READING		Intermedi- ate	286	9th Yr. 152 Sa	66			9/72		5/73					* Highly Significant @ p≤.01
- 2				V	V	V		10th Yr. 134 Ss		X		9/72	6.1	5/73	7.1	43	t =	6.6356	* Highly Significant @ p <<.01
-				C. A. T. MATH	A & B	4		9th Yr. 152Ss		X		9/72	3.8	5/73	5.6	34	t =	8.8036	* Highly Significant @ p <.01
\	V	V	Y	V	Y	Y	٧	10th Yr. 1345s		X		9/72	5.9	5/73	7.2	27	t≕	6.0809	* Highly Significant @ p <.01

 $\frac{1}{T}$ Total N (total number). Indicate the total number of participants in the component.

2/Y/N (yes/no) Is sample representative of universe? Check Y (yes) or N (no).

 $\int_{G} \frac{5}{d} \cdot f$. (degrees of freedom). Indicate degrees of freedom used in analysis.

^{2/}Group I.D. (group identification). Indicate group, e.g. grade 5; grade 3 control; grade 3 treatment (a control group consists of students selected at the same time that treatment participants were selected and who essentially have the same characteristics as the treatment group. The control group does not take part in the compensatory activity, whereas the treatment group does.)

 $[\]frac{4}{M}$ ean. Use grade equivalents unless unavailable from publisher's norms. Specify type of mean used.

ERICused and value (e.g., t=3.85, F=4.17, etc.). Scores for the same <u>individuals</u> should be included in pre and postest calculations.

45B. Standardized Test Results BENJAMIN FRANKLIN HIGH SCHOOL -- U N I T PROGRAM

In the table below, please enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. Attach additional sheets if necessary. Before completing this question, read all footnotes.

												•								
om- onent		Objec-	Used F	F		77	"A" UNIT					1	<u>5</u> /	Act	ua l		Stat		stical Data Specify Le	
	1 *	Code	(MAT, CAT.etc.)			11	Group	Size	3. V II	\ N	Date	4/ Moon	I Moon 4/	n .	4/	7/	Üsed	Ob- tained	nificance (e.g. p≤	0btained .05;≤.01
0715	710	800	M. A. T. READING	An Ca	Inter- medi- ste	295	9th Yr.	109	X		9/72	4.9	5.3	5/73	5.7	108	t=	4.5093	* Signif.	@ p <. 01
	V		C. A. T. M A T H	A	4	+	9th		$\frac{1}{1}$					<u>.</u>						
<u>v</u>	¥	Y	MATH	B	4	Y	Yr.	114	X		9/72	4.9	5.3	5/73	6.0	113	t=	6.5949	* Signif.	@ p ≼. 01
						'														
				-	,——·															

1/Total N (total number). Indicate the total number of participants in the component.

 $\frac{3}{4}$ /Y/N (yes/no) Is sample representative of universe? Check Y (yes) or N (no).

^{2/}Group I.D. (group identification). Indicate group, e.g. grade 5; grade 3 control; grade 3 treatment (a control group consists of students selected at the same time that treatment participants were selected and who essentially have the same characteristics as the treatment group. The control group does not take part in the compensatory activity, whereas the treatment group does.)

Mean. Use grade equivalents unless unavailable from publisher's norms. Specify type of mean used.

Predicted posttest. Use only for correlated samples using "historical" regression procedure.

Statistical data. Use test of significance for actual posttest v. predicted posttest where correlated samples are used. Indicate degrees of freedom used in analysis.

Prest used and value (e.g., t=3.85, F=4.17, etc.). Scores for the same individuals should be included in pre and posttest calculations.

.45B. Standardized Test Results BENJAMIN FRANKLIN HIGH SCHOOL -- U N I T PROGRAM

In the table below, please enter the requested information about the tests used to evaluate the effectiveness of major project components/activities in achieving desired objectives. Attach additional sheets if necessary. Before completing this question, read all footnotes.

												<u> </u>							
		•		7		nχn											Stati/	<u>stical Data</u> 6	ار
Activ	1 -	ì		,		UNIT					}	<u>5</u> /	Actu	Jal	1		t Test		
ity	· ·	Used	Form	Level				ple	, J	Pret	.est	Predicted '	Postt	<u>:est</u>	'	'	0b-	nificance:	
Code	Code	(MAT,			NI/			3/	/ -		4/		'	4/	12/	Used '	tained	(e.g. p≤.	.05;≤.01
		CAT, etc.			<u> </u>		Size	YI	ND.	ate	Mean	Mean 4/	Date'	Mean	df	<u> </u>	Value	•	
710	900	M. A. T.	AIII Bee	Inter- medi	1 286	9th	11			Inn	1 1 1			.			/ 20/	۷ × ۲۰۰۰ - ۳۲ تا	
110	000	KEAUING	C	ate	1-1-	Ir.	00	4	1	/12	4.7	4.5	17/12	7.2	102	<u> </u>	0.5202	* Signii.	@ p>UI
											<u> </u>				'		-		
++-	+	+	++	++-	#	Hoth	-	+	#	-					#		 		
		V	V	V		1	44	X	9	/72	6.1	6.5	5/73	7.1	43	t =	3.972	* Signif.	@ p≼.01
												•							
++-	++	C. A. T	•	+	#-	Gth	\vdash	+	+				-		#-	+	 		
		ł	. Üp	, 4		1.	35	X	9	1/72	3.8	4,1	5/73	5.6	34	t =	7,171	8 * Signif.	@ p < .01
11-		1	4	44	44				_					<u> </u>	₩.	 	ļ		
V	V		$ \psi $		Y		20			ו למן נ	F 0	42	r /72	7	ha		2 200	4 X C1 1 C	· · · · · ·
			<u> </u>		1	11.	20	A	47	1161	1 707	(,0	<u>(1) (0</u>	102	k1	<u>t -</u>	100/0C	" 51gn11.	₩ p=,.ui
	ity	ity tive Code	Code Code (MAT, CAT, etc.) 710 800 READING C. A. T. M A T H.	ity tive Used (MAT, CAT, etc.) 710 800 READING Cm C. A. T. A & B M A T H. B	ity tive Used (MAT, CAT, etc.) 710 800 READING Cm ate C. A. T. A & B 4	ity tive Used Form Level Total N1/ CAT, etc.) 710 800 READING Cm mediate 286 C. A. T. A & B 4	Activ- Objec- Test ity tive Used Code (MAT, CAT, etc.) 710 800 READING Cm level Total 2/ Group ID C. A. T. A & St. A	Active Objective Used Form Level Total 2/ Sams Code Code (MAT, CAT, etc.) 710 800 READING Cm level Total 2/ Group ID Size C. A. T. A & B 4 Yr. 44 C. A. T. A & B 4 Yr. 35	Activ- Objec- Test ity tive Used (MAT, CAT,etc.) 710 800 READING Cm atc Oth Yr. 44 X C. A. T. A & B 4 Yr. 35 X	Activ- Objec- Test ity tive Used Code (MAT, CAT,etc.) 710 800 READING Cm READING Cm At Str. 44 X 9, 10th	Activ- Objec- Test tive Used Form Level Total 2/ Sample Pret Code Code (MAT, CAT,etc.) 710 800 READING Code Code (MAT, READING Code Code (MAT, CAT,etc.) C. A. T. A & B 4 Yr. 44 X 9/72 C. A. T. A & B 4 Yr. 35 X 9/72	Activ- Objective Used Form Level Total 2/ Sample Pretest Group 1D Size Y N Date Mean 710 800 READING Cm READING Cm At Size Y N A T H. C. A. T. A & B 4 Yr. 44 X 9/72 6.1	Activ- Objec- Test tive Used Code (MAT, CAT.etc.) 710 800 READING Cm Mate Series (Code Code Code Code Code (MAT) (CAT.etc.) C. A. T. A. B. A. T. Mate Code (MAT) (Code Code Code Code (MAT) (M. A. T. CAT.etc.) C. A. T. A. B. A. B. A. T. Mate Code (MAT) (M. A. T. CAT.etc.) C. A. T. A. B. A. B. A. C. B. C. B	Activ- Objectity tive Used Form Level Total 2/ Sample Code (MAT, CAT,etc.) N1/ Group 3/ 24/ Predicted Postt Posttest N1/ Size Y N Date Mean Mean 4/ Date	Activ- Objectity tive Used Form Level Total 2/ Group 3/ ID Size Y N Date Mean 4/ Predicted Posttest 4/ Mean 4/ Date Mean 5/73 5.5	Activ- Object Test ity tive Used Code (MAT, CAT,etc.) Total N1 Sample Pretest Predicted Posttest Po	Activ- Objectity tive Used (MAT, CAT,etc.) READING C. A. T. A B A T. H. A T. A B A T. A B A T. A T. A B A T. A B A T. A T.	Active tive Used (MAT, CAT, etc.) 710 800 READING Com	Activ- Objec- Test ity tive Used Code (MAT, CAT,etc.) 710 800 READING Code (MAT ATH. AB 4 MATH. 286 MATH.

 $^{1/\}mathrm{Total}$ N (total number). Indicate the total number of participants in the component.

^{8/}Test used and value (e.g., t=3.85, F=4.17, etc.). Scores for the same individuals should be included in pre and posttest calculations.



^{2/}Group I.D. (group identification). Indicate group, e.g. grade 5; grade 3 control; grade 3 treatment (a control group consists of students selected at the same time that treatment participants were selected and who essentially have the same characteristics as the treatment group. The control group does not take part in the compensatory activity, whereas the treatment group does.)

 $[\]frac{3}{4}$ /Y/N (yes/no) Is sample representative of universe? Check Y (yes) or N (no).

 $[\]frac{4}{2}$ Mean. Use grade equivalents unless unavailable from publisher's norms. Specify type of mean used.

^{5/}Predicted posttest. Use only for correlated samples using "historical" regression procedure.

^{6/}Statistical data. Use test of significance for actual posttest v. predicted posttest where correlated samples are used.

 $[\]frac{7}{100}$ d.f. (degrees of freedom). Indicate degrees of freedom used in analysis.

Highly statistically significant gains in reading and in mathematics at the 1% level of probability (that such gains would occur by chance alone only 1 x out of 100 times) shown in Table 1 were obtained for all 9th and 10th year reading and mathematics groups in the "A" Unit and "X" Unit of the total student N = 581.

When recomputed by means of the Historic Regression Formula (see Appendix D), the statistical significance as shown in Table 2, holds for every grouping at the 1% level of probability, although the computed "t" values are seen to have faded to much smaller dimensions when a predicted post-test score is used as basis, instead of a simple correlated pre-test post-test set of score comparisons.

Criterion for this objective has been fully met with statistical significance strong at all points in reading and in mathematics achievement.



Findings for Eval. Obj. #2 Attitudes Held by Students

The late start in the evaluation, March 1973, with only one person assigned to all phases (vertical evaluation) required streamlining of the design with its nine objectives. Therefore Project Objectives A 1 - 5 were combined into a single one instead of separate evaluation instruments. To this was added Project Objective A 6 (originally intended for teachers and coordinator) readapted with work goals orientation questions for students (see Part III in the Questionnaire). The attitudinal instrument which thus combined Project Objectives A 1 - 6 = Evaluation Objectives 1 - 6 inclusive is called: BFHS Unit Program Student Questionnaire (Form A) and appears as Appendix A. Form B is an equivalent instrument readapted for use with 9th and 10th year students not in Unit Program, as controls, and is called: Benjamin Franklin H. S. Student Questionnaire. It appears as Appendix B.

The single administration of the 79 item - 5 section instrument was done in May 1973. Table 3 summarizes the data by percent along a 5-point scale of positivity from 0 = No; Not at All to 4 = Very Much with several Yes / No / Undecided sections added. The tally was performed by grade and by sex.

Insert Table 3 (See pp. 12-14)

In summary, Table 3 on the Student Questionnaire showed a predominance of positivity in all category areas. However, the control groups were not significantly distinguished in their responses from the Unit Program population. Analysis of response differentiation based on sex was also inconclusive.

The summary page of the above Table 3 and Student Attitudinal Survey statement as submitted to the N. Y. State Education Department on M.I.R. Form #45C appears reduplicated below as "Table 4."

Criterion for Eval. Obj. #2 is amorphous. Objective not fully met. (See full statement in Table 4).



Table 3

DATA OF STUDENT ATTITUDINAL QUESTIONNAIRE TOWARD UNIT PROGRAM May 1973

N = 187 + 55 Controls

Section I: Competence and Acquisition	Degree of Positivity by Percent of Response								
REQUISICION	O No; <u>Not at All</u>	1 A <u>Little</u>	2 Some- what	3 Quite <u>A Lot</u>	4 Very <u>Much</u>				
9th Yr. Males N = 59 (%)	12.8	19.1	17.7	28.5	21.9				
Females N = 78 (%)	13.6	15.8	16.8	25.2	28.5				
10th Yr. Males N = 27 (%)	6.3	14.2	21.6	34.7	23.2				
Females N = 23 (%)	10.0	23.0	26.6	21.5	19.0				
Controls: M + F = 22 + 33 9th + 10th Yr. T = 55 (%)	14.1	19.8	15.2	22.5	28.3				

Annotation: Ninth (9th) year females more strongly positive in attitude than 9th year males; 10th year males more strongly positive than 10th year females.

Controls were higher in the category of "little" than in "scmewhat."

Criterion: The criterion for Evaluation Objectives #1 and #2 was met in that more than 50% of Unit Program students perceived progress (positivity) in subject area acquisition and in competency in performing school tasks (categories 3 and 4) for all groups measured except 10th year females. Control students also manifested 50.8% positivity in their area.

Section II: Motivation and	Degree of Positivity by Percent of Response									
<u>Social Attitudes</u>	O No; Not at All	1 A <u>Little</u>	2 Some- what	3 Quite <u>A Lot</u>	4 Very <u>Much</u>					
9th Yr. Males N = 59 (%)	9.3	10.8	13.6	26.5	39.7					
Females N = 78 (%)	9.7	9.7	12.2	22.5	45.8					
10th Yr. Males N = 27 (%)	8.3	12.3	16.8	29.6	33.1					
Females N = 23 (%)	12.8	15.1	25.0	18.9	28.3					
Controls: M + F = 22 + 33 9th + 10th Yr. T = 55 (%)	8.9	11.5	16.3	24.1	39.2					

Annotation: Ninth (9th) year females more strongly positive in attitude than 9th year males; 10th year males more strongly positive than 10th year females.

Controls were undistinguished from the study population.

Criterion:
The criterion that for Evaluation Objective #3 of favorable pursuit, that the majority response is positive, has been met (highest categories 3 & 4) for all groups except 10th year females. Control students also achieved criterion at 63.3%.

ERIC

Section III: Orientation to World of Work				Positive or Negative by Percent of Respon							
	WOT	id of wor	<u>K</u>	<u>Yea</u>	<u>No</u>	Undecided					
9th Year	Males	N = 59	(%)	54.7	22.2	23.1					
	Females	N = 78	(%)	56.1	20.2	23.7					
10th Year	Males	N = 27	(%)	51.1	24.7	24.1					
	Females	N = 23	(%)	56 . 0	19.4	24.6					
Controls:	Total	N = 55	(%)	56.4	23.6	20.0					

Annotation: In every group, the positive or "Yes!" response exceeded 50% of responses.

Negative "No!" responses were near 20%.

Controls showed as high a positive orientation toward work as the

Unit Program population.

Criterion: Not applicable in Evaluation Objective #6 = Project Objective A6 for teachers and coordinators, as this objective was readapted for use in this Student Questionnaire. However, the response of more than 50% positivity is consonant with program objectives in general and is consistent with positive responses to other sections of the questionnaire.

Section IV: Social Interaction - Role Model and Self-Image - Identity

	A. Social			Role	Mod	e l	Figur	<u>e</u>
•	_	Role Mo	del	Teacher	Guidance Counselor	Parents	Friends	Others
9th Yr.	Males	N = 59	(%)	28.0	32.9	21.6	13.1	4.3
	Females	N = 78	(%)	21.1	32.0	26.8	13.0	7.0
10th Yr.	Males	N = 27	(%)	23.7	37.3	21.2	11.9	5.9
	Females	N = 23	(%)	27.3	38.3	18.8	9.4	6.3
Controls 9th & 10		N = 55	(%)	24.3	33.8	23.0	11.1	7.9

Annotation: Guidance Counselor was the first adult role model chosen by all Unit Program participant groups and Controls, followed by teacher, then parents. Interaction with peers (friends) ranked low as role model.

Criterion: Based on pre- post- administration in Evaluation Objective #4; is not applicable to this single administration where change in percentage choosing role models cannot be shown.



Section IV: (Continued) Attitude Toward Positive or Negative by Percent of Response Self-Image - Identity Undecided Yes No Males N = 599th Year (%) 40.8 19.5 39.7 Females N = 78(%) 46.4 19.3 34.3 10th Year Males N = 2743.8 20.5 35.7 Females N = 23(%) 36.9 12.6 50.5 Controls: 9th & 10th Yr. Total N = 5553.8 15.9 30.3

Annotation: All Unit Program groups responded positively to self-image items (about 40%) at a ratio over negatively (No!) at better than 2: 1 with large percentage "Undecided!"

But the Control group had the largest positive self-image response

But the Control group had the largest positive self-image response (better than 50%) a ratio of more than 3:1.

Criterion: Based on a pre-post administration called for in Evaluation Objective #5 not possible hero, improvement shown was a not applicable demand in this single administration of the questionnaire.

Section V:	Special Feat		Degree of	Positivity	by Percent of Response				
	or the onit	TIORIAM	O No; <u>Notat All</u>	1 A <u>Little</u>	2 Some- what	3 Quite <u>A Lot</u>	4 Very <u>Much</u>		
9th Yr.	Males N = 59	(<u>%</u>)	9.2	13.5	17.7	28.9	30.7		
·	Females N = 78	(%)	11.5	15.3	12.4	23.2	37.6		
10th Yr.	Males $N = 27$	(%)	5.6	9.2	21.3	28.1	35.9		
F	Females N = 23	(吳)	9•5	16.5	25.5	22.9	25.7		
Controls: 9th & 10th Yr.	Total N = 55	(X)	9•7	14.8	16.2	25.5	33.9		

Annotations: Degree of positivity to Special Features of Unit Program was about 60% for all groups except 10th year females where it was below half (50%).

Degree of positivity expressed by Controls to the general features of the general high school program surprisingly also ranked at 60%.

Criterion: These two dozen items were not part of design. Degree of positivity is informational to Project Coordinator and his staff on conduct of Unit Program.

	50HOOL ILAR 1972 - 73
	BENJAMIN FRANKLIN HIGH SCHOOL UNIT PROGRAM This question is designed to elicit the attainment of approved objectives not normally associated with measure
45C.	ment by norm referenced standardized achievement tests. Such objectives usually deal with behavior that is
•	indirectly observed, especially in the affective domain. For example, a reduction in truency, a positive
	indirectly observed, especially in the affective domain. For example, a reduction in creation, a posterior of disruptive behavior, an improved attitude toward self
	change in attitude toward learning, a reduction in disruptive behavior, an improved attitude toward self
	(as indicated by repeated interviews), etc., are frequently held to be prerequisite to the shift toward
	increased academic achievement by disadvantaged learners. Where your approved measurement devices do not
	lend themselves to reporting on tables 45A or B, use any combination of items and report on separate pages.
	Attach additional pages if necessary.
	UNITS "A" Component Code 607.15 Activity Code 710 Objective Code 800
	Brief Description BENJAMIN FRANKLIN UNIT PROGRAM STUDENT QUESTIONNAIRE A survey of attitudes toward
	the school within a school program, teaching authorities, social institutions, family life, work orientation goals, and self-imagemotivation factors.
	The current instrument has been developed as agreeable to evaluation agency and Unit Program staff from
	modifying the partly validated instrument of Teaching & Learning Research Corp. of New York's unpublished document from the 1971-72 evaluation year.
	Number of cases observed: 187 project participants + 55 Controls.
	Number of cases in treatment: (Same as above line)
	Pretreatment index of behavior (Specify scale used): A Semantic Differential Scale, simplified to 5-degrees
	of positivity-to-negativity was used for the 79-Item instrument, divided into 5 Subsections.
	INDEX OF BEHAVIOR: Relates to relative amounts of positivity over negativity in overall attitude on the
	5-point scale. Since this was a single administration (The Eval. Design was not implemented until
	March 1973), there was no pre-post measure of change in attitude available for the School Yr. 1972-73.
	NOT DEFINED. However, general preponderance of positivity of attitudes over negative by tally enumeration has been counted and listed.
	Was objective fully met? Yes No X If yes, by what criteria do you know? Although general preponderance of positive over negative check-offs occured, presence of some negative feelings indicates program has
	not yet achieved idealized state of (virtually) complete positivity of attitude.

28

Comments: Data still under analysis. To be completed later for inclusion in Final Evaluation Report

Final Evaluation Report.

Findings for Eval. Obj. #3 --- Attitudes Held by Staff

In accordance with an added evaluation objective (Objective #10) to the design, an attitudinal survey by questionnaire of all Unit Program staff toward the total program was conducted. The instrument used was the <u>Staff Questionnaire</u> in a one-time administration given toward the end of the school year, May 1973. It consists of 12 content items subdivided, and open-ended essay commentary. It was produced in three stages cooperatively with the staff, based upon a feedback process in two staff conferences with the evaluator.

Table 5 displays the findings. The Staff Questionnaire given as a take home instrument has been reproduced as Appendix C. There is no stated criterion.

Table 5

DATA OF THE STAFF QUESTIONNAIRE
Benjamin Franklin Unit Program — Spring 1973

Staff Breakdown Returning Questionnaire

13 teachers
3 curriculum developers
1 administrator of unit
4 educational assistants
1 guidance counselor
N = 22

Unit Program Breakdown*

12.5 staff in "A" Unit (for 9th gr. only)
8.5 staff in "X" Unit (for 9th & 10th Yr.)

One position shared + One guidance counselor.

1. Entry

In Unit Program: by Choice - 17 (77.2%) by Draft - 5 (22.7%)

Reasons for

Choice:

4 - motivated by new program

3 - job available; asked to fill in

3 - convenient sched.; fewer preps.; late session

2 - prefer working with freshmen

1 - needed job

1 - altruistic motive

1 - other

2 - No Response.



Meetings

Attend Unit Program staff meetings,

on the average:

4 - once / month

8 - once / week 6 - twice / week

1 - three x / week

2 - No Response

Attend regular High School faculty

and departmental meetings,

on the average:

Guidance

2 - None

5 - once / month

6 - twice / month

3 - once / week 6 - No Response

					(No and)	
	. (General Use	efulness o	f Meetings	(No. and) (<u>Percent</u>)	
	5 Very	4	3	2	1 Very	
Category:	Positive (++)	Positive (+)	Neutral (0)	Negative (-)	Negative (—)	
Administrative	3 (14.3)	8 (38.1)	5 (23.8)	4 (19.0)	1 (4.8%)	
Curricular	2 (10.5)	8 (42.1)	4 (21.0)	4 (21.0)	1 (5.3%)	
Guidance	2 (11.1)	9 (50.0)	5 (27.8)	1 (5.6)	1 (5.6%)	
		How Well	Organized	No. & (P	ercent)	_
Category:	<u>(++)</u>	(+)	(0)	(-)	<u></u>	
Administrative	1 (5.0)	12 (60.0)	4 (20.0)	0 (0.0)	3 (15.0%)	
Curricular	1 (5.3)	6 (31.6)	8 (42.1)	2 (10.5)	2 (10.5%)	i

Should Increase or Decrease in Frequency

4 (22.2)

1 (5.6)

Category:	5 (++)	(+)	3 (0)	2 · (-)	1 (=)
Administrative	1 (5.3)	0 (0.0)	13 (68.4)	3 (15.8)	2 (10.5%)
Curricular	1 (5.0)	2 (10.0)	11 (55.0)	3 (15.0)	3 (15.0%)
Guidance	0 (0.0)	5 (26.3)	10 (52.6)	2 (10.5)	2 (10.5%)
	Ļ	<u> </u>	L	l	<u> </u>

1 (5.6) 11 (61.1)

Α.	Interest in teaching Unit Program classes	More Interest	Less <u>Interest</u>	Same as Before
	as compared to previous taught classes.	12 (54.5%)	1 (4.5%)	7 (31.8%)
В.	Teaching method change as result	Has Changed	Has Not Changed	
	of Unit Program.	13 (59.%)	4 (18.1%)	
c.	J ,	Imposed	Not Imposed	i
	<pre>imposed by Program situation;</pre>	9 (40.9%)	6 (27.2%)	, ,
	Or, imposed by higher administrative authority.	2 (9.0%)	14 (63.6%)	
х.	Not Applicable.	2 (9.0%)		

Stu	dent - Teacher Re	lations				No. and
			Before Comi	ng to Un	it Program	(Percent
		5 Very	4	3	2	1 Very
		Positive (++)	Positive (+)	Neutral (0)	Negative (-)	Negative ()
Α.	Rapport with whole class	4 (18.2)	8 (36.4)	4 (18.2)	0 (0.0)	0 (0.0%)
В.	Rapport with Individuals	5 (22.7)	9 (40.9)	2 (9.1)	0 (0.0)	0 (0.0%)
C.	Mutual Respect	5 (22.7)	9 (40.9)	2 (9.1)	0 (0.0)	0 (0.0%)
			Currently :	in Unit P	rogram (No. and Percent)
		5 } (++)	4 (+)	3 (0)	2	1 ()
A.	Rapport with whole class	3 (13.6)	10 (45.5)	4 (4.5)	1 (.)	0 (0.0%)
В.	Rapport with Individuals	10 (45.5)	6 (27.3)	2 (9.1)	0 (0.0)	0 (0.0%)
C.	Mutual Respect	4 (18.2)	11 (50.0)	2 (9.1)	1 (4.5)	0 (0.0%)



Table 5 (Continued)

5. Personal Attitude Toward Administrators

		5	4	3	2	1
Adm	inistrative	, Very			•	Ver y
. <u>Off</u>	icer Category:	Positive (++)	Positive (+)	Neutral (0)	Negative (-)	Negative ()
Α.	Principal	0 (0.0)	5 (22.7)	7 (31.8)	5 (22.7)	1 (4.5)
В.	Ass't. Principal for Student Personnel	c (o.o)	3 (13.6)	13 (59.0)	2 (9.1)	0 (0.0)
C.	Ass't. Principal for Pedagogic Personnel	0 (0.0)	3 (13.6)	10 (45.5)	4 (18.2)	1 (4.5)
D.	Departmental Chairman	3 (13.6)	6 (27.3)	9 (40.9)	1 (4.5)	0 (0.0)
E.	Dean	2 (9.1)	2 (9.1)	11 (50.0)	1 (4.5)	1 (4.5)
F.	Other				1 (4.5) Unit Admin	

Abstentions = 3/22 (13.6%)

Program Support by Administrative Category

	•	5 (++)	(+)	(0)	(-)	1 ()	
Α.	Unit Administrator	7 (31.8)	8 (36.4)	4 (18.2)	2 (9.1)	0 (0.0)	
В.	Unit Coordinator "A" or "X"	8 (36.4)	8 (36.4)	2 (9.1)	2 (9.1)	0 (0.0)	
C.	Curric. Developers (Tchr. Specialists)	6 (27.3)	9 (40.9)	4 (18:2)	2 (9.1)	0 (0.0)	
D.	Guidance Counselors	7 (31.8)	8 (36.4)	5 (22.7)	0 (0.0)	0 (0,0)	
Ε.	Social Workers	4 (18.2)	5 (22.7)	10 (45.5)	1 (4.5)	0 (0.0)	

Abstention = 1/22 (4.5%)

Recommendation on how each of above Administrative Category should better serve Unit Program in future:

- Unit Admin.
- Clarify all issues better.
- Better understand "philosophy" of U.P.; needs of students; professional accountability.
- Handle budget better.
 more clearly.
 classroom work and problems.
- Define responsibility for other Stay in closer contact with



6. Recommendations on Admin. Categories: (Continued)

- B. Unit Coord.

 Provide better leadership role; be more supportive and involved.

 Better understanding of "philosophy" of U. P.

 Hew to educ. objectives more.

 Hold more meetings; devel. more group consciousness.
- C. Curric. Devel. Eliminate this position and thus decrease teacher:student ratio (class size).
 - Restrict them more as to what they're allowed to do in class.
 - Need to be held accountable to someone.
 - Fulfill job description properly; better attend to needs of students; require professional accountability.
 - Set up programs to deal with reading problems.
 - Stretch the mind more creatively.
 - Relate programs better to clearly defined learning objectives.
 - Direct workshops for classroom teachers.
- D. Guidance Couns. Fulfill job description properly.
 - More open meetings to vent students and teachers feelings.
 - More frequent meetings to inform teachers of student problems.
 - More group work with students and parents.
- E. Social Workers Make this an integral part of Unit Program.
 - Give more feedback to teachers on students' progress.
 - Should be present at Guidance Couns. meetings to give input.
 - Generally closer contact needed. More group work needed.

7. Teacher - Teacher Attitude How well each Unit Program staff person relates to and communicates with fellow colleagues with respect to classroom curriculum.

Degree of Positivity-Negativity by No. & (Percent)

	5	4	3	2	1
	Very Positive (++)	Positive (+)	Neutral	Negative (<u>-</u>)	Very Negative ()
A. With Fellow Teachers in Same Unit	4 (18.2)	14 (63.6)	1 (4.5)	1 (4.5)	0 (0.0%)
B. With Teachers in Same Dep't., but Not in U. P.	1 (4.5)	12 (54.5)	6 (27.3)	1 (4.5)	0 (0.0%)
C. With Teachers in Diff. Depts., out of Unit Program.	1 (4.5)	5 (22.7)	11 (50.0)	2 (9.1)	0 (0.0%)



8.	Future Plan	Choice	Choice by Number & Percent		
	A. Whether plan to stay at Benjamin Franklin H.S.	Plan to Stay	Plan Not to Stay	<u>Undecided</u>	
		.s. 18 (81.8)	1 (4.5)	3 (13.6%)	
	B. If plan to stay at BFH whether prefer to stay in Unit Program.		Return to Other BFHS Programs 6 (27.3)	Undecided 5 (22.7%)	

9. Attitude to Student Options A. "Phasing" (6-week cycles) 18 (81.8) 2 (9.1) 2 (9.1%) B. Multi-Choice Options from "Catalogue" 15 (68.2) 2 (9.1) 4 (18.2%)

10. Attitude to Course Preparation and to Teaching Assistants

		<u>Favorable</u>	<u>Unfavorable</u>	Undecided
A.	Having to Prep. Two Courses per "Phase" (per 6-week cycle)	10 (45.5)	2 (9.1)	6 (27.3%)
В.	Having Teaching Ass'ts. in Unit Program	19 (86.4)	2 (9.1)	0 (0.0%)
C.	Using Teaching Assits. in one's own Classroom	15 (68.2)	3 (13.6)	2 (9.1%)

Advantages and Disadvantages to having to prepare at least Two Courses for each 6-week "phase" (cycle):

Advantages

- Variety
- Injects new interest
- Efficiency
- Better planning
- Units of work more discrete
- Get more work done more quickly
- Continuous stimulation change
- Student choice according to interest; Learn more
- Like changes; break up bad classes; counteract boredom
- Courses more 'relevant'
- More options for better learning
- Keeps one up on methods & mat.

Disadvantages

- Too confusing
- Too many changes
- Limiting as to subject matter
- Harder to know students well
- Extra Registrations too time consuming
- More complex; harder to work out
- Students choose courses to be with friends, rather than where they need to be
- Courses are too shallow
- Breaks down momentum
- Loss of continuity
- Frequent newness equals rougher sailing!
- Too much work
- Too much pressure.



11. <u>Difficulties & Satisfactions of Work</u> of Unit Program Teachers

Compared to teaching in regular H.S. program:

A. Level of difficulty of teaching in Unit Program

More Difficult	Less Difficult	Same Level of Difficulty
8 (36.4)	6 (27.3)	4 (18.2%)

B. Factors making the work More / Less Difficult

Less Difficult

- Good administration
- Closer to students-have them one whole year
- Presence of extra support personnel
- Shorter, more convenient 6-week unit of time
- Help from student assits.

More Difficult

- Hectic 6-week pace
- Large student turnover
- More prep work due to individualization
- More preps with more peer pressure
- Too many behavior problems
- Program attracts students who are less interested; less able
- 9th grade students drain one so much emotionally
- Hard to achieve rapport with younger students
- Students have poor attitude toward homework.

Compared to teaching in regular H.S. program:

C. Degree of Reward in teacher's work in Unit Program

More	Less	Equally	
Rewarding	Rewarding	Satisfying	
11 (50.0)	3 (13.6)	5 (22.7%)	

D. Factors making the work
More / Less Personally Rewarding

Less Personally Rewarding

- Not enough student interest in learning
- Cannot identify with nonacademic type students
- Immaturity of students
- Harder to handle younger, more deficient students
- Inability to communicate and reach rapport with younger students.

More Personally Rewarding

- General positive feelings
- Feel part of team
- Can see student progress more quickly
- Students are more responsive in U.P.
- Can spend more time with each stud.
- Improved student socialization
- Satisfying personal experience as Assistant Unit Coordinator.



12. Further Recommendations

- More individualized instruction
- More audio-visual materials
- Choose teachers only who volunteer for Unit Program .
- Enlarge Resource Library & materials
- Provide special student labs. for math and reading
- Help teachers to develop curriculum
- Provide teacher training workshops
- More extra-curricular student activities --plays, newspaper, student council, dances, trips
- Provide interdisciplinary courses
- Be stricter with students in classroom
- Increased time for contact with guidance counselors and social workers
- Recruit Unit Program teachers from outside Benjamin Franklin H. S.

- Expand "A" Unit through 10th grade
- Articulate better with feeder JHS's
- Grant more freedom from BFHS administrative "fiats"
- Give option for 10th grade to continue into 11th grade
- Phase out Unit Program, and disperse it into the whole school dep't.-by-dep't

From Ass't. Unit Coord.

- 1. Elect Unit Coord. by Unit staff
- 2. Stabilize staff by incentives; reduce turnover

From Guidance Counselor

- 1. Provide Career Ed. for students
- 2. Increase group work
- 3. Improve communication between teachers and administrators

13. Open Comments

- It is a good supportive program for entering freshmen, filling their need to belong to a special group.
- The idea of Unit Program is valid and will prove superior to conventional instruction; but, there should be more involvement of guidance counselors, social workers and school psychologists in Unit Program with corresponding decrease or elimination of Curriculum Coordinators (Developers), seen as a waste and boondoggle--they should be back in the classroom to reduce the teacher:student ratio.
- Other support personnel that are most important to success of U. P. are the Educational Assistants in the classroom, thus making more individualized instruction available to students.
- Provide questions for Educational Assistants in this questionnaire relating to home visitations.
- Be stricter with student course options with minimum requirements and stop student picking courses just to be with friends. A program of discipline backed up by action would prepare students for a more advanced curriculum, a "disciplined academic career," and give them more stability.
- Unit Program has deviated from its original purpose in 6 years. It needs an educational change, and end to internal preservation of self-perpetuating leadership which operates by means of chain of command. Goals and purposes need clear redefinition. Right now it lacks direction.
- Six (6) week phases give students more sense of choice in the ed. program.
- "Phasing" is counter-productive, because class changes every 6-week cycle breaks chance to continue rapport. Prefer homogeneous grouping of slow and fast students to move together at own pace rather than wide freedom of choice.
- Teachers should work on problem students in groups and involve parents to meet with them also.
- Leaving U.F. to teach college bound students for deep personal, psychological reasons that brook of no further explanation here.



Findings for Eval. Obj. #4 Reduction of Dropout Rate

Table 6 below summarizes dropout data from five 9th grade classes and from five 10th grade classes in "X" Unit of the Unit Program, and from one dozen "control" classes of the same two grades, except that these students and classes not in Unit Program were not randomly selected; they just happened to be rapidly available. Information about "A" Unit classes was recorded in different form so that data about program leavers was not retained.

Insert Table 6 (See Page 25)

Random selection of control students was not performed as per design requirement. Nonetheless discharge data to serve as a good approximation of dropout from a number of whole classes not in Unit Program have been accessed as shown on the right half of the table. This serves as comparison rather than as strict control data to the Unit Program class groups for the following reasons:

- (1) Corrected school dropout information was not readily available before end of June 1973, for the program year.
- (2) Leavers from Unit Program transferring into regular classes were put into the same category as students leaving the high school from control or comparison classes. Therefore, true comparison of "control" class groups with Unit Program class groups was not feasible, and the validity of the statistical comparison may be suspect.
- (3) Lack of time and personnel factors were major problems in providing a random selected sample as large as the size called for to complete this objective.

In the results from Table 6, program leavers from Unit Program averaged slightly more than 1/6th (17.5%). Data averages from rapidly chosen whole comparison classes were slightly more than 2/5ths (41.1%). 41.1% - 17.5% = 23.6%. This is less than the 25% greater reduction of dropouts for U.P. classes than for comparison "controls" demanded by the design. Hence the criterion has <u>not</u> been met. Also, since "dropout"



UNI	T PR	OGRAM	WH # 4 44-16-64-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6-6	CONVENTIONAL CLASSES				
9th Grade Class	Class Register	No. of Dropouts* from U.P.	% of Dropouts from U.P.	9th Grade <u>C l a s s</u>	Class Register	No. of Dropouts** from BFHS	% of Dropouts from BFHS	
2-11	31	6	19.4	2-32	33	10	30.3	
2-12	32	12	37.5	2-33	23	14	60.7	
2-13	29	2	6.9	2-34	28	15	53 . 6	
2-14	29	5	17.2	2-35	23	17	73.9	
2-15	31	4	12.9	2-36	29	14	48.3	
	-	- Marie and	मना करू व म्	2-37	34	9	26,5	
Subtotal 9th Grade	152	29	19•i	Subtotal 9th Grade	170	79	46.5	
10th Grade Class		~ ~ ~ ~ ~ ~		10th Grade Class	~ ~ ~ ~ ~		** ** ** ** *	
4-22	26	3	11.5	4-8	34	11	32.4	
4-23	28	6	21.4	4-11	34	11	32.4	
4-24	28	7	25.0	4-13	35	9	25.7	
4-25	25	5	20.0	4-15	23	10	43.5	
4-26	27	0	0.0	4-21	28	8	28,6	
alan direktura ayıyı		##Tibers	ndini uranga	4Ca27	26	16	61.5	
Subtotal 10th Grade	134	21	15.7	Subtotal 10th Grade	180	65	36.1	
GRAND TOTAL ALL "X" UNIT	286	50	17.5	GRAND TOTAL NON-U.P. CLASSES	350	144	41.1	

^{*} Defined only as Program Leavers, transferring out of Unit Program Home Room Class.

39

Dropouts defined only in terms of Dischargees from each class regardless of reason.

appears to have a different connotation in and out of Unit Program classes, applicability of design criterion is uncertain; validity questionnable. The objective was not fully implemented.

Findings for Eval. Obj. #5 Attendance Study

Table 7 presents the summary of average attendance by class and grade for Units "A" and "X" and for such "control" classes as rapidly available. Again with the large number of 9th graders (in their first year at BFHS), details of accessing their attendance from junior high schools and other locations to meet the design requirement was not feasible within the time and budget limitations for this objective. What has been compared, is whether current Unit Program class attendance for 1972-73 has exceeded general non-Unit Program class attendance for 1972-73 by the same comparative amount (20% - 50% improvement for U. P. enrollees -- defined as lower absence rate) as demanded in original Design Objective #9.

Insert Table 7 (See page 27)

Table 7 clearly shows that Unit Program students attendance greatly exceeded that of controls. The average difference between the 64.6 days absence of controls and the 38.2 days absence of U. P. enrollees (26.4 days) is 14.7% of the 180 days in the school year. Put another way, the 35.9% absence rate of non-program students appears reduced 14.7% in absence rate for participants exposed to Unit Program. There was no important difference between 9th year and 10th year groups for either Unit Program enrollees or the control classes.

The objective was implemented in a positive direction for attendance improvement for students in Unit Program, as simplified for a modified Design. However, since the criterion for attendance improvement was set at 20% - 50%, the average difference of 14.7% effected by the project, does not meet the criterion.



			" · · · · · · · · · · · · · · · · · · ·	ورونية المتعادلة والتعادلة				
UNI	T PR	OGRAM	1	CONVENTIONAL CLASES				
9th Grade Class	Class Register	Yearly Rate of Abs Days / 180	Yearly % of Absence Days / 180	9th Grade Class	Class Register	Yearly Rate of Abs Days / 180	Yearly % of Absence Days / 180	
"A" 2-16 UNIT 2-17 2-18 2-19 2-20 2-21 2-22 2-23 2-24 2-25	17 12 02 16 17 12 08 16 14	29.7 20.2 49.0 39.8 36.6 22.5 23.0 28.5 32.9 23.2	16.5 11.2 27.2 22.1 20.3 12.5 12.8 15.8 18.3 12.9	2B3 2B4 2B5 2-32 2-33 2-34 2-35 2-36 2-37 2-49	18 19 17 31 23 20 20 28 34 30	25.6 24.2 19.7 87.8 75.2 88.4 82.9 71.2 69.8 83.5	14.2 13.4 10.9 48.8 41.8 49.1 46.1 39.6 38.8 46.4	
"X" 2-11 UNIT 2-12 2-13 2-14 2-15	25 19 28 23 25	67.0 51.8 34.8 39.4 48.4	37.2 28.7 19.3 21.9 26.9	Oth Condo	N 40 49 49 49 49 49 49 49 49 49 49 49 49 49			
9th Gr Subtot	253	38.2	21.2	9th Grade Subtotal	240	66.6	37.0	
10th Grade Class "X" UNIT 4-22 4-23 4-24 4-25 4-26	23 21 20 20 20 27	28.0 54.3 42.8 43.0	15.6 30.2 23.8 23.9	10th Grade Class 4-8 4-11 4-13 4-15 4-21	33 33 34 33 29	.39.3 40.1 53.2 53.7 77.1	21.8 22.3 29.6 29.8 42.8	
10th Gr Subt.		28.1 38.4	15.6	4C82;	25	127.4	70.8	
GRAND TOTAL		J0.4 ————————————————————————————————————	21.3	10th Gr Subt.	187	62.1 .	34.5	
9th & 10th GRADES	364	38.2	21.2	GRAND TOTAL 9th & 10th GRADES	427	64.6	35.9	

Difference: Controls @ 64.6 Average days Absent - U.P. @ 38.2 Ave. days Abs. = 26.4 Ave. days Abs. (Diff.)

Diff. = 26.4 dy / 180 dy. = 14.7% Average percent of difference.

14.7% Improvement, U.P. over Controls < 20% - 50% Improvement. Criterion NOT met!

erion:

42

E. OTHER NARRATIVE INFORMATION

(INCLUDING: SUMMARY, CONCLUSION & RECOMMENDATIONS)

1. Summary of the Alternative School-Within-a-School Project

Title I funds supported 5 teacher specialist - - curriculum developers, and 10 educational assistants working directly with students in learning situations with learning materials in this \$228,598. recycled project which provided a total high school program for over 550 educationally disadvantaged youth showing three or more years of measured retardation in reading and in mathematics. Title I additionally funded 2 guidance counselors, 0.5 of a social worker and 2 family assistants to work with student problems beyond the classroom. The high school's regular Table of Organization provided the regular classroom teachers and the Unit Coordinator of this program.

Main goals of the project were concerned with:

- (1) overcoming serious deficiencies in reading and in mathematics;
- (2) improving attitudes toward school;
- (3) improving self-image and social relationships;
- (4) increasing aspirations toward the world of work;
- (5) reducing dropoutism; and
- (6) increasing classroom attendance.

The nine (9) Evaluation Objectives of the Design were modified by combining into one, several instruments to assess attitudes; thus resulting in five (5) Evaluation Objectives during the implemented evaluation of Spring 1973.

The following findings resulted from applied instruments of evaluation:

Eval. Objective #1. Statistically significant gains in reading and in mathematics achievement were obtained by a pre- post-measure historical regression design, using the Intermediate form of the Metropolitan Achievement Tests in reading, and the Level 4 form of the California Achievement Tests in mathematics. Predicted post-test scores were exceeded by actual post-test scores in reading and in mathematics, such as to surpass the 1% level of probability that these gains occurred 43



only due to chance on correlated "t" tests. Hence the criterion of statistical significance for this objective has been fully met. The results have been summarized to the New York State Education Department on M. I. R. Form 45B.

Eval. Objective #2. Attitudes held by students toward the school environment, self-image, social relationships, and work aspirations were assessed by a single 79 item questionnaire. The total Unit Program population was surveyed as well as controls in the general 9th and 10th year high school program outside the U. P. Positivity of attitudes over neutral or negative ones was shown in all category areas for both Unit Program and control populations with relatively minor difference percentages between Unit Program participants and controls. Since specific criteria for the various categories other than general positivity of attitudes has not been established, and since the survey instrument was administered only once at the end of the school year, the objective cannot be said to have been fully met.

Eval. Objective #3. Attitudes held by staff toward their work in Unit
Program was assessed by a single end-year administration of a 5-page staff questionnaire. Staff opinion was generally favorable toward the program with specific
criticisms and suggestions levelled at various points, particularly at curriculum
developers and unit administrator. Again as for Objective #2 (above), since there
was no stated criterion other than that the total Unit Program faculty be thoroughly opinion surveyed, it cannot be stated that an objective was fully met with
respect to staff attitudes.

Eval. Objective #4. This objective on the reduction of dropour rates was only partially implemented, because students selected for controls were not randomly selected as called for in the Design, but chosen only in whole available class groups, and because dropouts from Unit Program tended to transfer to regular high school classes, whereas leavers from regular classes had no place else to go in the school—thus tended to drop out. A comparison of Unit Program and control classes for leaving revealed a 41.1%



^{- 17.5% 23.6%} difference. Since this is somewhat less

than the minimum required 25% greater average dropout rate for control classes than for Unit Program classes, the criterion was not achieved. Although there was a fairly large reduction of dropoutism for students in Unit Program for various reasons, the objective was not fully met.

Eval. Objective #5. This study on hopefully improved attendance for students participating in Unit Program was only a partially implemented objective, because of the difficulty in obtaining 2-year longitudinal data on students in Unit Program (U. P. being mainly the first year in the high school) and in their previous year elsewhere for the same students. Instead, Unit Program students attendance was compared class by class with average attendance of others in classes in the regular high school program, as controls. The Unit Program population showed a better average attendance over the control population by 14.7%. With the criterion for attendance improvement due to Unit Program set at 20% - 50%, the criterion has not been met, and the objective for attendance (even though improvement was shown) has not been attained.

2. Conclusion of the Sixth Year for the Benjamin Franklin Unit Program

With the direction of findings for all five (5) objectives held to be in a positive direction and with highly statistically significant in provement obtained in the hard data components of reading and of mathematics achievement, according to the instruments and historic regression method used, it is concluded that THE UNIT PROGRAM IS AN EFFECTIVE SCHOOL WITHIN A SCHOOL PROJECT THAT PRODUCES STRONG POSITIVE LEARNING ACHIEVEMENT AND POSITIVE ATTITUDINAL AFFECTS UPON A DISADVANTAGED 9th AND 10th YEAR HIGH SCHOOL POPULATION, SELECTED FOR THEIR DEFICIENCIES IN READING, IN MATHEMATICS AND IN THEIR ATTITUDE SET.



3. Recommendations of the Unit Program Evaluation

The principal recommendation that flows from the objective findings and the above-stated conclusion is that the Unit Program should be recycled for the 7th consecutive school year at Benjamin Franklin High School (1973 - 1974) as a very worthwhile project with no reduction in staff or funding.

Consideration should be given to expanding the program making it available to as many students meeting the criteria of deficiencies in reading, in mathematics, and in attitudes toward education and themselves as indicated in the original Design. This point of view of project expansion is detailed in seven (7) specific recommendations together with the rationale or explanation for each which follow. These seven recommendations are based on project findings, interview with the Unit Coordinator and his staff, and general concurrence.

(1) Student Population. Expansion of the program to include 300 9th and 300 10th grade enrollees, and 125 11th graders continuing from the school year 1972-73, is recommended.

Explanation. As high or higher motivational listings of program students on Student Attitudinal Questionnaire as compared to motivational listing of control students on the equivalent attitudinal survey instrument may be used to justify expansion as well as continuation of the program.

- (2) Staffing. Strengthened staff to operate the program:
 - a. Avoiding austerity cuts in numbers of teaching positions.
 - b. Maintaining faculty: student ratio on same level as for 1972-73 school year.
 - c. Favoring including ESL personnel reading specialists and remedial mathematics specialists.
 - d. Releasing of teaching Unit Coordinator and his his assistant administrators from teaching loads in excess of 2 periods daily.

Explanation. Weaker than sought for gains in reading and in withematics, comparing 1972 data and 1973 projections, point to a need for restoring strength of these components in federally funded programs to help achieve immediate goal of rapid increment in reading and in mathematics. Diffusion of funds and personnel tends not to sustain or support the outputs of a program. E. G. Higher Herizons fund diffusion led to lowered gains in program output. Large programs (involving hundreds of students) need continuity of key teaching administrators to coordinate and administer the program within the high school.



(3) Updated Test. Replace the 1959-60 edition of the Metropolitan Achievement Tests in Reading, forms Am, Bm & Cm with the Metropolitan 1970 Reading Tests, forms F, G and H.

Explanation. Based on judgment of Reading Curriculum Developers, students, especially ESL students handle new tests better visually. Metro. '70 tests were validated with N. Y. City school population, and may therefore represent a more nearly "culture fair" application of a test instrument.

(4) Attitudinal Survey. Administration of the Student Attitudinal Questionnaire on a pre-post school year basis at the same week in September and at end of May as the weeks that the standardized achievement tests in reading and mathematics are given.

Explanation. Alternate forms of the Student Attitudinal Questionnaire for Unit Program and Control student groups have been developed with approval of Unit Program staff, and have been administered the student body in school year 1972-73. These are in readiness for dual administration for the school year 1973-74 whereas in previous years, forms were not developed and readied until the spring term.

(5) Funds for Media and Materials. Allocate funds for mediated instruction written into the budget, including the formation of two Language Learning Laboratories with capacity of 30+ student stations each, that could together handle 600+ students per day on a 10-period scheduling basis. A budget formula of from 12% to 15% of total annual funding for audio-visual materials, language tapes and other components for remedial instruction, is suggested.

Explanation. Many programs with large numbers of ESL students utilize audio-visual components more than has been current practice, as means to vary the pace and mode of presentation, replicate valid instructional units, and utilize audio-lingual comprehension skills.

(6) Streetworkers Influence on Instruction. Utilize "School Neighborhood Workers" (Streetworkers) to follow-up on student problems and keep a high level of motivation, enrollment and attendance in the Unit Program throughout the school year.

Explanation. When the New York State Education Department allows streetworker personnel to split their time when funded, approximately 50%: 50% between classroom instruction: neighborhood work in funded programs, this can provide additional fractional teaching-educational assistant positions, provide for more community-school liaison, and increase employment toward career ladders in education for indigenous persons in the community.



(7) Teacher Training Sessions. Provision of on-the-job teacher training sessions to upgrade skills of Unit Program staff.

Explanation. Weekly staff meetings may be reorganized as indicated in statements made on the Staff Questionnaire, so as to clear business-administrative tasks rapidly, then devoting the balance of the weekly session to teacher training, led by consultants (paid as hired mercenaries by the session). Consultant experts can be employed to give training sessions in such areas as:

- (1) Precision teaching techniques.
- (2) Team teaching techniques.
- (3) Behavior Modification techniques.
- (4) Small group, seminar and interactional class analysis.
- (5) Programmed lesson development.
- (6) Use of audio-visual and audio-lingual materials and approaches to remedial instruction.



F. EXEMPLARY PROGRAM ABSTRACT

(See Abstract of the Project, immediately preceding Section A, page 1)

Explanation. Exemplary programs or components with statistically significant results (beyond expectation) are abstracted to be made more readily available throughout New York State for Educational Programs desiring to try to replicate said exemplary programs.

* * *

LIST OF APPENDICES

Appendix	T i t l e	Page
Α.	BFHS Unit Program Student Questionnaire (Form A)	35
В.	Benjamin Franklin H. S. Student Questionnaire (Form B)	41
c.	Eenjamin Franklin Unit Program S t a f f Questionnaire	47
D.	Historical Regression Method ("Rhode Island Formula")	52
E.	Other Narrative Information	54

* * *



(Form	• •	Brhs	UNLT	PKUGKAM
	A)	STUDENT	QUEST	IONNAIRE

Name	APPENDIX A.	·	_
Class	or Group		
Date			

How well I feel I am doing in the Unit Program.

Directions:

Put a Circle around the number that best describes how you feel about each statement:

0 = No, or Not at all
1 = A little

2 = Somewhat

3 = Quite a lot

L = Very much

1.	Most of my classes in the Unit Program are interesting.	0	1	2	3	4
2.	I understand and can do the class work in most of my Unit classes.	0	1	2	3	4
3.	My ability in English reading has improved in Unit Program.	0	1	2	3	4
4.	My ability in English writing has improved in Unit Program.	0	1	2	3	4
5.	My ability in Mathematics has improved in Unit Program.	0.	1	2	3	4
6.	I accept and can do most of my homework assignments.	õ	1	2	3	4
7.	I do more reading outside of school time now than before coming to Unit Program.	0	1	2	3	4
8.	I study enough for all my tests.	0	1	2	3	4
9.	I recognize and accept the importance of taking so many reading and math tests for Unit Program.	0	1	2	3	4
10.	I follow directions my teachers give me without much difficulty.	0	1	2	3	4
11.	Unit Program courses in English and Mathematics help me do better in science, pocial studies and other subjects.	0	1	2	3	4
12.	Unit Program courses have helped me to handle money matters better.	0	1	2	3	4
13.	Since coming to Unit Program, I have taken greater interest in, and have gone to more cultural affairs—theater, plays, concerts, museums, etc.	0	1	2	3	4



	I take part and express myself by speaking in good English more in classes since coming to Unit Program.	0	1	2	3	4
15.	My grades in courses are generally better this year in Unit Program.	0	1	2	3	4

II How I feel toward the school, teachers, authorities, social institutions, my family and work.

Directions:

Put a Circle around the number that best describes how you feel about each statement:

0 = No, or Not at all! 1 = A little 2 = Somewhat 3 = Quite a lot 4 = Very much To me, a good education makes a man (woman) 16. 3 1 2 4 a better member of the community. 0 Getting an high school diploma is 17. 1 2 3 0 4 important to me. 18. Getting good grades is 2 3 important to me. I feel my teachers are interested in how well 0 1 2 3 4 I do in school. I feel I get along well with 0 1 2 3 4 my teachers. I think order and organization in the classroom 1 2 3 4 0 are important. I think the Unit Program helps the student to 22. 1 2 3 0 take his place in society. 23. I have an easier time talking this year with my: 1 2 3 4 a) teachers 0 1 2 3 G 4 b) assistant principal c) guidance coordinator 2 3 and dean . 0 1 4 I think that the teachers in Unit Program 24. 2 1 3 4 are doing their job well. I think that the people running the Unit Program 2 0 3 4 are trying to give me a good education. My parents help me with homework from Unit Program 2 3 0 4 if I have problems.



27.	My parents attitude toward my school work is				_		
	better since I joined Unit Frogram.	0	1	2	3	4	
28.	I feel that the Unit Program will better help prepare me for the world of work than regular high school.		1	2	3	4	
29.	I feel that the Unit Program helps me to think about what my roll will be later on as a man (woman).	0	1	2	3	4	
30.	I am able to work closer with my school friends in Unit Program than in regular high school.	0	1	2	3	4	
31.	Classes in Unit Program make me feel more a part of Ben Franklin than regular classes.	0	1	2	3	4	

III How I feel about the World of Work.

Directions:

Check the Box appropriate to your reply for each item.

		Yes	Un- decided	N o
32.	A person can learn more by working three years than by going to high school.			
33.	I know more about jobs this year thanks to Unit Program.			
H.	If I could choose now between a full-time job and school, I would choose school.			
J5,	I plan to go to: a) college or community college	·		
	b) technical, trade or secretarial school			
	c) get a job right after H. S.			
	d) other (specify)		•	
36.	Since I have been in the Unit Program, I feel that I can have more control over what happens to me in my life.			
37.	I have a good chance of being successful in life.			
38.	An high school diplome will help me to get a good job.			
39.	I am generally satisfied with the Unit Program the way it is now.			



- -40. I would like Unit Program to prepare me better for a particular job.
 - 41. Starting my own family now, is more important to me than finishing my high school.
 - 42. Trips that help us to find out about different jobs are important to me.
 - 43. If I have work to do, I feel it is important to do a good job.
 - 44. I think it is important to be able to do many things well so that I can be prepared for whatever happens.

Yes	decided	N o

IV My opinion about myself and the people I am with in Unit Program.

Directions:

Check the Box appropriate to your reply for each item.

- 45. When I have a problem with a daily assignment, the first person I go to for help is....
- 46. When I seem to have a lot of trouble with ALL my work in one of my classes, the person I go to for help is
- 47. If I have trouble talking to my teachers, I then go for help to
- 48. When I need help with a personal problem, the person I first go to is a)

Then the second person I would go to would beb)

49. When I want help to find a job, I go to

Teacher	Guidance Coun- sellor	Parents	Friends	Others (Name <u>Who)</u>

- 50. I feel better about myself since coming to Unit Program.
- 51. I want to learn more about people from other cultures.

Y e s	Un- decided	N o
	,1	

52 .	I identify more strongly with my own group (race, culture) since coming to Unit Program.	<u>Үев</u>	Un- decided	<u>N</u> o
53.	I feel I can recognize my strengths and weaknesses better since coming into Unit Program.			
54.	Unit Program has <u>not</u> made any difference in my life.			

V How I feel about the Special Features of the Unit Program.

Directions:

Put a Circle around the number that best describes how you feel about each statement:

0 = No, or Not at all!

1 = A little

2 = Somewhat

3 = Quite a lot 4 = Very much

	I LEARN FROM:					·····	_
55.	discussion	0	1	2	3	4	
56.	worksheets	0	1	2	3	4	
57.	reading	0	1	2	3	4	
58.	writing exercises	0	1	2	3	<i>Ļ</i>	
59.	films; slides	0	1	2	3	4	
60.	trips	0	1	2	. 3	4	
61.	my uwn experience	0	1	2	3	4	
62	other (specify)	•					
63.	other (specify)	•					
	ABOUT MY COURSES, I WOULD SAY THAT:						
64.	It is important to choose courses	0	1	2	3	4	
65.	I liked chocsing courses	0	1	2	3	4	
66.	I had a lot to choose from	0	1	2	3	4	



	I CHOSE MY COURSES:						
67.	according to who taught them	0	1	2	3	4	
68.	according to my interests	0	1	2	3	4.	
69.	because I had to (requirements)	0	1	2	3	4	
70.	because the work was important to know	0	1	2	3	4	
71.	my friends were taking those courses	0	1	2	3	4	
	THE CATALOGUE:						
72.	helped me	0	1	2	3	4	
73.	told me what the courses were really like	0	i	2	3	4	
•	MY GRADES:	٠					
74.	were fair	0	1	2	3	4	
75.	were decided by the teacher alone	0	1	2	3	4	
76.	showed how much I learned	0	1	2	3	4	
77.	showed how much work I did	0	1	2	3	4	
	COMPARED TO MY OTHER YEARS IN SCHOOL:						
78.	I liked this year	0	1	2	3	4	
79.	I learned	0	1	2	3	4	

END OF STUDENT QUESTIONNAIRE



Name

•	Class or Group					
How well I feel I am doing at Een Franklin. Directions: Put a Circle around the number that describes how you feel about each somewhat all i=A little 2=Somewhat 3=Quite a lot 4=Very much						
1.	Most of my classes at Ben Franklin are interesting.	o .	1	2	3	4
2.	I understand and can do the class work in most of my classes.	0	1	2	3	4
3.	My ability in English reading has improved at Ben Franklin.	0	1	2	3	. 4
4.	My ability in English writing has improved at Ben Franklin.	0	1	2	3	4
5.	My ability in Mathematics has improved at Ben Franklin.	0	1	2	3	4
6.	I accept and can do most of my homework assignments.	0	1	2	3	4
7.	I do more reading outside of school time now than before coming to Ben Franklin.	0	1	2	3	4
8.	I study enough for all my tests.	0	1	2	3	4
9.	I recognize and accept the importance of taking so many reading and math tests in high school.	0	1	2	3	4
10.	I follow directions my teachers give me without much difficulty.	0	1	2	3	4
11.	My high school courses in English and Mathematics help me do better in science, social studies and other subjects.	0	2	2	3	4
12.	My high school courses have helped me to handle money matters better.	0	1	2	3	4
13.	Since coming to Ben Franklin, I have taken greater interest in, and have gone to more cultural affairs theater, plays, concerts, museums, etc.			2	3	4

if I have problems.

2

3

4

0

1

BER	3-73 BFF	S Form B			App.	В	-3-
27.	My parents attitude toward my schebetter since I came to Ben Frankl		0.	1	2	3.	4
28	I feel that my high school programme for the world of work.		0	1	2	3	4
29.	I feel that the high school prograbout what my role will be later	am helps me to think on as a man (woman).	0	1	2	3	4
	I am able to work closer with my coming to Ben Franklin.	school friends since	0	1	2	3	. 4
31.	My classes make me feel a part of community.	the Ben Franklin	0	1	2	3	4
III	How I feel about the World of Wor	<u>'k</u>		•			
		eck the Box appropriate or each item.	to	ycur	rep	ly	
			IIn-	,			

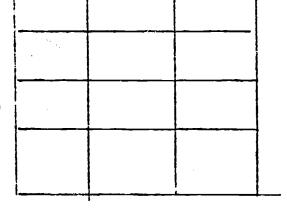
		Yes	Un- decided	. No	•
32.	A person can learn more by working three years than by going to high school.				1
33.	I know more about jobs this year thanks to Ben Franklin.				
34.	If I could choose now between a full-time job and school, I would choose school.				<u>.</u> .;
35.	I plan to go to: a) college or community college				
	b) technical, trade or secretarial school				
	c) get a job right after H.S.				1
	. •		+		†
	d) other (specify)				
36.	Since I have come to Ben Franklin, I feel that I can have more control over what happens to me in my life.				
37.	I have a good chance of being successful in life.				
38.	A high school diploma will help me to get a good job.				
39.	I am generally satisfied with the $B_{\mbox{\scriptsize en}}$ Franklin program the way it is now.				



No

Undecided

- 40. I would like Ben Franklin to prepare me better for a particular job.
- 41. Starting my own family now, is more important to me than finishing my high school.
- 42. Trips that help us to find out about different jobs are important to me.
- 43. If I have work to do, I feel it is important to do a good job.
- 44. I think it is important to be able to do many things well so that I can be prepared for whatever happens.



Parents, Friends, Others,

IV My opinion about myself and the people I am with at Ben Franklin.

Directions:

Check the Box appropriate to your reply for each item.

Teacher Guidance

Yes

45.	When I have a problem with a daily assignment, the first
	person I go to for help is

- 46. When I seem to have a lot of trouble with ALL my work in one of my classes, the person I go to for help is ...
- 47. If I have trouble talking to my teachers, I then go for help to
- 48. When I need help with a personal problem, the person I first go to is ... a)

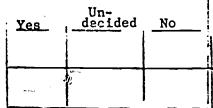
Then the second person I would go to would beb)

49. When I want help to find a job, I go to ...,

<u> </u> _	 sellor_		 Who)	
		•		
		·		-
-				_
			9	-
•				
				_

50.	I feel	better about	myself	since	coming
		Franklin.			•

51. I want to learn more about people from other cultures.



- 52. I identify more strongly with my own group (race, culture) since coming to Ben Franklin.
- 53. I feel I can recognize my strengths and weaknesses better since coming to Ben Franklin.
- 54. High School has not made any difference in my life.

Yes	Un- decided	<u>No</u>

V How I feel about the Special Features of the Ben Franklin Program.

Directions:

I LEARN FROM:

Put a Circle around the number that best describes how you feel about each statement:

O=No, or Not at all l=A little 2=Somewhat 3=Quite a lot 4=Very much

55.	discussion	

55.	discussion	0	1	2	3	4
56.	worksheets	0	1	2	3	4
57.	reading	0 .	1	2	3	4
58.	writing exercises	0	1 .	2	3	4
59.	films; slides	0	1	2	3	4
60.	trips	0	1	2	3	4
61.	my own experience	0	1	2	3	4
62.	other (specify)	0	1	2	3	4

ABOUT MY COURSES, I WOULD SAY THAT:

other (specify)

- 64. I feel it is important to choose courses.
- 0 1 2

1

0

- 65. I would like to choose courses.
- 0 1 2 . 3 4

3

3

- 66. I would have a lot to choose from.
- 0 1 2 3 4



63.

er# 3

	I WOULD CHOOSE MY COURSES:					
67.	according to who taught them	0	1	2	3	4
68.	according to my interests	0	1	2	3	4
69.	because I had to (requirements)	0	1	2	3	4
70.	because the work was important to know	0	1	2	3	4
71.	my friends were taking those courses	0	1.	2	3	4
	A CATALOGUE OF COURSES:					
72.	would help me	0	1	2	3	4
73.	would tell me what the courses are really like	0	1	2	3	4
	MY GRADES SO FAR:					
74.	have been fair	0	1	2	3	4
75.	were decided by teachers alone	0	1	2	3	4
76.	showed how much I learned	0	1	ζ.μ. Č	3	4
77.	showed how much work I did	0	1	2	3	4
	COMPARED TO MY OTHER YEARS IN SCHOOLS:					
78.	I liked this year	0	1	2	3	4

* * * * *

2

0 1

END OF STUDENT QUESTIONNAIRE

Form B

79. I learned

Appendix C

BENJAMIN FRANKLIN UNIT FROGRAM STAFF QUESTIONNAIRE

Core	and Dimentions Complete the fallesian 10 d	.	(N	ame ptio <u>nal</u>	\	_
kee	eral Direction: Complete the following 12 icing in mind that additional comments on any	r		osition		
	n may be numbered and listed on 6 pen Comment $m #13$.	S	Į į	nit		
	•	Choole			74	
1.	ENTRY:	oneck	Арри	priate	Line	
	I am in Unit Program by	choice	•			-
!	If by choice, state reason for choice.	cuorce	1		draft	•
2,	MEETINGS: I attend staff meetings of Unit Program (not counting regular and departmental meetings) an average of times	(II)	70			
	per week; and	(How m	any?)			•
	I attend regular faculty and departmental meetings an average of times per week.	(How m	any?)			
	Unit Program Meetings convene for admin-	Number	Scale	for Po	sit ivi	ty-Negativity:
	istrative matters, curriculum conference, guidance, etc. State name of eastype of meeting you attend. Next to each, write down the number re-	5 Very <u>Positi</u>	Pos	si- Ne	3	2 1 Nega- Very tive Negative
	presenting the strength of your opinion for each of the three categories listed:	Genera Useful of Mee	ness	How we Meetin Are Or zed	gs	How Frequently Should Meetings Be Held? 3 = Same as Now
		•				
						
		-			-	
				·		
	(Specific Further Comments on General Useful Made In Item #13, At End).	llness o	f Name	d Meeti	ngs Ab	cove, May Be
3.	CLASSROOM INTEPLST: a) In my teaching in Unit Program, I am as interested in my classes as previous- ly taught non-Unit classes	-				
	Ty caught hon-one; crasses	more		less		the same as before
	b) I feel there been a change in my teaching method (way or style of teaching) since coming to Unit Program.	has		has not		
٠.	c) If my teaching style or method has changed, I find that it been imposed upon me by the nature of	-				
\mathbf{C}	imposed upon me by the nature of the program 47 -	has		has not		
ERIC	- +1 -	62				

	c) (Continued) or, that it been imposed upon me by a higher	has	has i	not		
4.	aministrative authority. S=T RELATION: With regard to the three areas listed under (a), (b), and (c) below, I found my relationships to students	Number S 5 Very Positive	calc for 4 Posi- tive	Positi 3 Neu- tral	vity-Neg 2 Nega- tive	Very
	to be: (Use the numbered scale to the right) a) Rapport with whole classes.	Before C Unit Pro	_		rently i t Progra	
	b) Rapport with Individuals.					
	c) Mutual respect.					
5.	PERSONAL ATTITUDE TOWARD ADMINISTRATORS: Indicate your attitude to whether you feel the following administrators have given definite support to the special aspects of the Unit Program. (Use the numbered scale to the right)	Number S 5 Very Positive	4 Posi-	Positi 3 Neu- tral	vity-Neg 2 Nega- tive	gativity: 1 Very <u>Negative</u>
	a) The Principal b) Ass't. Prin. for Student Personnel c) Ass't. Prin. for Pedagog.Personnel d) Departmental Chairman e) Deans f)	<u> </u>				
6.	PROGRAM SUPPORT: Indicate whether to your knowledge you have found that each of the following School Divisions has provided particular support for the Unit Program: (Use the numbered Scale to the right) a) The Unit Administrator b) The Unit Coordinator (A or X)		e of Prop 4 Posi-	gram Su 3 Neu-	pport: 2 Nega-	ativity 1 Very Negative
	c) Curriculum Developers (Teacher Specialists) d) Guidance Counselors e) Social Worker (Half-time)					
	For the above potential support services, according to your response, would you please make a recommendation of how you would like each to serve the Unit Program in future: a)					·
	b)	e)	· · · · · · · · · · · · · · · · · · ·			
						



7.	T - T ATTITUDE: What is your attitude (i.e.: How do I relate to; How much and how well do I communicate with) fellow colleagues with respect to classroom curriculum:	Number Scale for Positivity-Negativity: 5 4 3 2 1					
		Very <u>Positive</u>	Pos:		Nega- tive	Very Negative	
	a) Teachers in my Unit.						
	b) Teachers out of the Unit, but in my Department.					without 1	
	c) Teachers out of the Unit in different departments.			-	·	ELIPERATURE .	
8.	FUTURE PLAN: Do you plan to stay at Ben Franklin?						
	If you plan to stay, indicate whether you would prefer to stay in Unit Program.	Plan to	Stay	Plan Not S t a y	to Un	decided .	
		Stay in	U.P.	Return to Other BFH Programs		decided	
9•	ATTITUDE TO STUDENT OPTIONS: How do you feel about students in Unit Program having the opportunity for "Phasing" (6 x 6 week cycles per School Year) with options for use of the "Catalogue" for each student having multiple choices during registration?:	Favorab	<u>le</u>	<u>UnFavorable</u>	<u>Undec</u>	: <u>ided</u>	
	a) On "Phasing," am				engang, samu H.	:	
	b) On Multiple Choice Registration Options from the "Catalogue," I am						
	(If you have further comments on this Item, please use space on Item 13).			-		·	
10.	ATTITUDE TO COURSE PREP. & TEACHING CONDITION: a) How do you feel about having to prepare at least two courses for each 6-week "phase?"	Favorab.	<u>le</u>	Unfavorable	Undec	eided	
	Regardless of your answer, list one or more advantages:						
	Regardless of your answer, list one of more disadvantages:						

9

10.	(Continued)		<u>Favorable</u>	Unfavorable	Undecided
	b) How do you feel about having Teaching Assistants in Unit Program?				
	c) How do you feel about using Teaching Assistants in your classroom?				
11.	DIFFICULTY & SATISFACTIONS OF WORK OF UNIT PROGRAM TEACHER				
	As compared to teaching in the regular Ben Franklin program, I find teaching in Unit Program a) Level of difficulty:	a)	More Difficult	Less Difficult	Of the Same Difficulty
	b) State one factor making the work more/less difficult:	•			
	c) Degree of reward in the work:	c)	More Personally Rewarding		
·	d) State one factor rendering the work more/less rewarding:		:		
12.	FURTHER RECOMMENDATIONS: State briefly or list, several specific regret to be included or changes made reperation of Unit Program for future year	in			
					
			· · ·		
		•			

13. OPEN COMMENTS:
In the remaining space, and, if necessary, on back of this Staff Questionnaire, please write any additional comments pro- or con- RE: the Unit Program as a whole; specific components; on administrative support; teacher-student interaction; curriculum and instruction; or, any other areas not dealt with above.

Furthermore, where your further commentary refers to any of the items on preceding pages, please number your commentary same as the item in question.



APPENDIX D

HISTORICAL REGRESSION METHOD ("RHODE ISLAND FORMULA")

On being a comparison of <u>actual post-test data</u> on a (usually standardized test) instrument with <u>anticipated post-test data</u>, based on pre-test data only (before the experimental or program treatment) and using the "Rhode Island Formula" to account for normal hypothetical rate of student growth (the "Historical Regression" effect). In one phrase--

ACTUAL OR TREATMENT POST-TEST vs. ANTICIPATED WITHOUT TREATMENT DESIGN:

- Step 1. Obtain each pupil's pretest grade equivalent.
- Step 2. Subtract "1" (since most standardized tests start at grade equivalent 1.0).
- Step 3. Divide the figure obtained in Step 2 by the number of months the pupil has been in school to obtain a hypothetical (historical regression) rate of growth per month. Beginning in 1st grade, 1 school year = 10 months; hence, rate of growth is hypothetically 0.1 grade equivalent per month.
- Step 4. Multiply the number of months of Title I (or other federally or State aided) treatment by the historical rate of growth per month.
- Step 5. Add the figure obtained in Step 4 to the pupil's pretest grade equivalent (Step 1).
- Step 6. Test the difference for significance between the predicted posttest mean for the group and the obtained posttest mean by means of a correlated "t" ratio test.

Example:

- 1. Pupil's pretest score was 8.5 grade equivalent in a standardized reading test.
- 2. 1.0 (constand factor) = 7.5.
- 3. Pupil a 10th grader = 100 months of schooling @ 10 mos./yr. Divide 7.5 / 100 = .075, rounded to .08.
- 4. The Title I treatment was for a full school year = 10 months. 10×0.1 g. e. growth rate per month (hypothetical = 1.0 grade equiv.
- 5. Hypothetical 1.0 + pretest 8.5 = 9.5 grade equiv. 9.5 is predicted posttest score.
- 6. Actual posttest score was 9.9 g. e. 9.5 (from Step 5) = 0.4 g. e. diff. 0.42 = 0.16 difference squared.

REPEAT STEPS 1-6 for every student in group and perform correlated "t" ratio



according to the formula:

$$t = \frac{\sum d}{\sqrt{\left[N \times \sum (d^2) - (\sum d)^2\right]/(N-1)}}$$

Where:

N = No. of students in group
d = diff. between actual and predicted posttest scores.

Use table of "t" values from R. A. Fisher & F. Yates.



APPENDIX E

E. OTHER NARRATIVE INFORMATION

The creation of units has greatly facilitated the achievement of each objective of the program. The unit consists of 300 students, ten teachers and two guidance counselors. The counselor is able to know and meet with, on a regular basis, all the teachers of the students he or she is counseling. Likewise communication from teacher to counselor is greatly enhanced. This unit approach has allowed us to establish and maintain a more extensive and meaningful home contact program in that the gathering of info mation about a pupil's progress or the setting up of a meeting of a parent with all his or her child's teachers was a simple process.

The regular meetings by the staff of each unit concerning, among other things, such areas as cutting, lateness to class and attendance, allow us to make significant inroads in reversing those types of behavior as compared with the general school population.

Further, the uniting of students and teachers has lead to a constant reaffirmation of goods and a rekindling of energies toward their achievement.

The greatest strides in the reading program were made this year in the quality of reading remediation offered 9th year students who entered school scoring below 4 on the Metropolitan Reading Test, Intermediate Level. This group comprised approximately 21% of the student population of the Unit Program.

The reasons why improved morale and real results existed in this group of very low readers for the first time are as follows:

- 1. Students were identified and placed in special classes where because of team teaching, paraprofessionals and student tutors they could receive "one to one" instruction for a least 2/3rds of their class time.
- 2. A compilation was made with a wide variety of high interest material which teaches basic decoding and language skills. Some of this material was purchased with Federal funds, but much of it was custom made by the Units "A" and "X" reading staffs.
- 3. Existence of a creative writing program in which students could participate with immediately observable results and satisfaction.

In summary: The reading staff has developed a much-increased awareness of the mystifying and varied skills involved in decoding the written work. With this, most important of all, has come a much greater ability to make instruction in these basic decoding skills digestible by 9th graders.



- 54 -

The participants followed Phase Programming. In Phase Programming, each semester is divided into three phases of approximately thirty school days each. A "phase" is similar to a unit of work within a term, but has the advantage of being a self-contained unit, chosen by the student, and individually graded. Each phase begins with a programming day during which students select their new programs from a course catalog prepared by the program staff and listing thirty or more course offerings on each grade level. Each phase constitutes a marking period with report cards issued approximately three days after the end of the phase. There was a choice for students of three or more offerings (differing in content) in each subject area. A sampling of courses that have been offered includes Workshop in Math Computation, Map Skills, The Black Experience in Poetry, Projects in Science, Newspaper, Phonics and Word Skills, Tools of Measurement, Reading Laboratory, Life in Africa Today, Television Workshop, Blood and its Diseases, Drama Workshop and Letter Writing.

This kind of programming has provided greater flexibility and choice, greater motivation and has established more clearly defined goals since a contract can literally be drawn between teacher and student regarding the work to be done in a given course. Experience with Phase Programming has resulted in enthusiastic reactions from students and staff. Phase Programming has increased the complexity of curricular planning, broadened the concept of subject area and led to greater interdisciplinary planning. Outgrowths of phase courses have included the growing of a garden on the roof of the school, the use of community facilities and the involvement of guest speakers in classes, all of which have added dimension to the school experience of students. Because of the modular design of program time, classes may profit from taking place in locations outside the school such as hospitals, city agencies, museums and places of business and industry.

Phase Programming was an outstanding contributor to the success of the math and reading programs in that students were able to choose skills work or more general topics every six weeks. This meant that a student was taking a class because he wanted to and felt he needed it. This was considered to be an important motivational force for the students achievements in the reading and mathematics programs.



¹ Condensed and Edited from New York State Education Department M. I. R. (Mailed Information Forms), Section III -- Outline for Marrative Report prepared by Unit Coordinator Hal Haicken, aided by his staff in Unit Program.